Currently Amended Paragraphs of the Specification

Please amend paragraph [0037] to read as follows:

In a preferred embodiment, the contents of the program storage 310, i.e., the software that controls the operation of the programmable controller 308, can be remotely downloaded, e.g., from the clinician's programmer 172 using data modulated onto an RF signal or an AC magnetic field. In this embodiment, it is preferable that the contents of the program storage 310 for each SCU 302 be protected from an inadvertent change. Accordingly, the contents of the address storage circuitry 108, i.e., the ID 303, is preferably used as a security code to confirm that the new program storage contents are destined for the SCU 302 receiving the data. This feature is significant if multiple patient's patients could be physically located, e.g., in adjoining beds, within the communication range of the clinician's programmer 172.

Please amend the Table I, which follows paragraph [0040], to read as follows:

Current: continuous current charging of storage capacitor

Charging currents: 1, 3, 10, 30, 100, 250, 500 μ a

Current Range: 0.8 to 40 ma in nominally 3.2% steps

Compliance Voltage: selectable, 3-24 volts in 3 volt steps

Pulse Frequency_(PPS): 1 to 5000 PPS in nominally 30% steps

Pulse Width: 5 to 2000 μ s in nominally 10% steps

Burst On Time (BON): 1 ms to 24 hours in nominally 20% steps

Burst Off Time (BOF): 1 ms to 24 hours in nominally 20% steps

Triggered Delay to BON: either selected BOF or pulse width

Burst Repeat Interval: 1 ms to 24 hours in nominally 20% steps

Ramp On Time: 0.1 to 100 seconds (1, 2, 5, 10 steps)

Ramp Off Time: 0.1 to 100 seconds (1, 2, 5, 10 steps)

Table I - Stimulation Parameters

Please amend step 3 of the table following paragraph [0067] to read as follows:

3. Set Parameter Following step

2, the surface

of hand

magnetic

programmer

187 is placed

on skin and

held as

required (e.g.,

for a minimum of 3 seconds).

The length of

time required

will depend on

the number

parameters and

the method

used to sense

the desired

parameter.

Implantable device 100 responds

and cycles through pulse rates

stepping from one rate to the

next as fitted-appropriate for the

needed stimulation for the

patient. The magnet 1010 is

removed when the desired rate is

reached.

Please amend paragraph [0069] to read as follows:

Combinations of timing and slider positions may be used. Patients with a poor sense of timing, may use position combinations as well. Typical examples include: 0 followed by A, 0 followed by B, A followed by 0, B followed 0, etc. In such programming combinations, the patient may need two hands. One; one to hold the magnet, the other to move the slider.

Please amend paragraph [0071] to read as follows:

The use of a magnet is desirable for most applications because it is passive and a magnet may usually be found whereever wherever the patient travels. Magnetic polarity sensing may be used to facilitate programming of multiple parameters or multiple stimulators/sensors 100. Many patients, however, may not be able to use manual timing for programming and will require a more automatic system. In these applications, a light/IR sensor may be used. Such a hand control produces a flash of light that is sensed and recognized by the implantable device 100. This type of system uses batteries to power the active hand control system which provides control based on the number and timing of the flashes.

Please amend paragraph [0072] to read as follows:

While the invention herein disclosed has been described by means of specific embodiments and applications thereof, numerous modifications and variations could be made thereto by those skilled in the art without departing from the scope of the invention set forth in the claims. For example, the clinician's programmer 172 could be used to specify a single adjustable parameter (or a limited set of adjustable parameters) and thus the magnetic programmer 187 could be limited to modifying the specified parameter(s) and excluded from modifying the others. Also, the clinician's programmer 172, could be used to restrict the range of adjustment to the one or more adjustable parameters. Alternatively, the presence of the magnetic programmer 187 could be used to determine whether the clinician's programmer 172 would be operative, i.e., it's its ability to alter the implantable device 100 could be interlocked to require a sensed magnetic field before it would accept programming, thereby increasing the security against program alterations. Other such permutations and combinations thereof can likewise be accomplished with the present invention. It is therefore to be understood that within the scope of the claims, the invention may be practiced otherwise than as specifically described herein.